

DATA ITEM DESCRIPTION

Title: Personnel/Work Standards

Number: OE-025.01

Approval Date: 20021001

AMSC Number:

Limitation:

DTIC Applicable: No

GIDEP Applicable: No

Office of Primary Responsibility: CEHNC-OE-CX

Applicable Forms:

Use/Relationship: The Personnel/Work Standards describe the personnel qualifications and work requirements for Ordnance and Explosives (OE) projects.

Requirements:

1. Qualifications of proposed key personnel and of personnel filling core labor categories (see paragraphs 3 and 4) shall meet the requirements listed below and shall be submitted in resume form. The resumes shall document all required educational and experience requirements. A sample resume is provided at Attachment A of this DID. Resumes for Unexploded Ordnance (UXO) personnel shall be accompanied by the Explosive Ordnance Disposal (EOD) school course graduation certificate. Resumes need not be submitted for personnel listed on the USAESCH Database for UXO Personnel; Contractors need only submit name, proposed position, and UXO number. The Contractor shall certify in writing to the Contracting Officer (CO) that UXO personnel scheduled to fill the positions of Senior UXO Supervisor, UXO Safety Officer, and UXO Quality Control Specialist are fully qualified to fill those positions. Also, the Contractor shall certify in writing to the CO that all personnel scheduled to fill UXO positions, except UXO Sweep Personnel, are in full compliance with 18 U.S.C. 842. Exceptions to the requirements stated in this DID shall be submitted to the CO for approval. The other labor categories are provided for the Contractor's encouraged use and guidance.

2. Unexploded Ordnance (UXO) Personnel, General.

2.1 UXO personnel, assigned to positions UXO Technician I, UXO Technician II, UXO Technician III, UXO Safety Officer, UXO Quality Control Specialist, and Senior UXO Supervisor, shall be U.S. citizens and graduates of one of the following schools or courses:

- a. U.S. Army Bomb Disposal School, Aberdeen Proving Ground, MD;
- b. U.S. Naval EOD School;
- c. EOD Assistants Course, Redstone Arsenal, AL; EOD Assistants Course, Eglin Air Force Base, FL; or, a DoD certified equivalent course.

2.2 The term UXO Qualified Personnel applies only to personnel meeting the requirements for the positions of UXO Technician II, UXO Technician III, UXO Safety Officer, UXO Quality Control Specialist, and Senior UXO Supervisor.

2.3 UXO Experience. UXO personnel may get credit for experience under the two following conditions. Experience will be granted for assignment to a military active duty EOD position and/or for a contractor position designated in the Service Contract Act, Directory Of Occupations as a UXO Technician.

2.4 EOD experience in National Guard or Reserve Units will be based on the actual documented time spent on active duty, not on the total time of service.

3. **Key Personnel.** When required for the work effort, the following personnel will be designated as key personnel and shall meet the minimum qualifications listed for each labor category.

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3.1 Geographic Information Systems (GIS) Manager. This individual shall have a minimum of 3 years of direct experience managing computerized GIS such as Microstation, ESRI, Arc/Info, or ArcView. Operation and management of site specific GIS, based on USAESCH hardware and software standards described in DID OE-005-14.01, may be a major element of this project.

3.2 Geophysicist.

a. **Project Geophysicist.** This individual shall have a degree in geophysics, geology, geological engineering, or a closely related field, and shall have a minimum of 5 years of directly related geophysical experience. This individual has overall responsibility for design, implementation, and management of all geophysical investigations required for the work effort, but may not necessarily be on-site full time. This individual shall be the project geophysicist-of-record.

b. **Site Geophysicist.** This individual shall have the same education requirements as the Project Geophysicist, except the 5 years minimum experience requirement is waived, if working under the general supervision of a Project Geophysicist. This individual is responsible for day-to-day operations of the site geophysical investigations. This individual may also be the Project Geophysicist if he/she meets the qualifications of "Project Geophysicist" above.

3.3 Project Manager. This individual shall have at least 3 years experience in general contract project management on programs similar in size and complexity to the effort described in the Statement of Work (SOW).

3.4 Senior UXO Supervisor (SUXOS). This individual shall be a graduate of a school listed in paragraph 2.1.a or 2.1.b. This individual shall have at least 15 years UXO experience, which shall include 5 years in supervisory positions. A SUXOS must be able to fully perform all of the functions enumerated for UXO Sweep Personnel and UXO Technicians I, II, and III. In addition, the ability to perform the following functions is a requirement for the SUXOS: Planning, coordinating, and supervising all contractor on-site OE activities; preparing standing operating procedures (SOPs) for OE operations, ensuring compliance with DOD directives as well as local, state, and Federal statutes and codes; and certification of Ammunition, Explosives, and Dangerous Articles (AEDA) and/or range scrap as ready for turn-in or disposal in accordance with current policies. The SUXOS must also be fully capable of supervising multiple project teams which may be performing OE and OE-related activities: e.g., vegetation removal; land surveying; reconnaissance and classification of OE, pyrotechnic items, and military explosives and demolition materials; locating surface and subsurface OE; destroying UXO and OE by burning or detonation; and/or transporting and storing OE and demolition material.

3.5 UXO Safety Officer (UXOSO). This individual shall have the same minimum qualifications as a UXO Technician III as listed in paragraph 4.2. In addition, this individual shall have the specific training, knowledge, and experience necessary to implement the SSHP and verify compliance with applicable safety and health requirements. This individual must be able to perform all functions enumerated for UXO Sweep Personnel and UXO Technicians I, II, and III. In addition, the UXOSO must have the ability to implement the approved OE and explosives safety program in compliance with all DOD, Federal, state, and local statutes and codes; analyze OE and explosives operational risks, hazards, and safety requirements; establish and ensure compliance with all site specific safety requirements for OE and explosives operations; enforce personnel limits and safety exclusion zones for OE clearance operations, UXO and explosives transportation, storage, and destruction; conduct safety inspections to ensure compliance with OE and explosives safety codes; and operate and maintain air monitoring equipment required at a site for airborne contaminants.

3.6 UXO Quality Control Specialist (UXOQCS). This individual shall have the same minimum qualifications as a UXO Technician III as listed in paragraph 4.2. In addition, this individual shall have documented Quality Control training. This individual must be able to fully perform all functions enumerated for UXO Sweep Personnel and UXO Technicians I, II, and III. This individual must have the specific training, knowledge, and experience necessary to fully implement the contractor's QC plans. In addition, the UXOQCS must have the ability to implement the OE specific sections of the Quality Control Program for all OE-related evolutions; conduct quality control inspections of all OE and explosives operations for compliance with established procedures; and direct and approve all corrective actions to ensure all OE-related work complies with contractual requirements.

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4. **Core Labor Categories.** The following labor categories may be required for each work effort, as described in each specific Task Order/Delivery Order.

4.1 **Civil Engineer.** This individual shall have, as a minimum, a bachelor's degree in Civil Engineering or Civil Engineering Technology and 3 years of field or office experience. Preferably, this individual should have a minimum of 3 years experience in OE or OE-related activities. This could include surveying, mapping, aerial triangulation, global positioning system, geographic information systems development, or project management.

4.2 **UXO Technician III.** This individual, who supervises a project team, shall be a graduate of a school listed in paragraph 2.1. This individual shall have experience in OE clearance operations and supervising personnel, and shall have at least 10 years UXO experience. This individual must be able to fully perform all functions enumerated for UXO Sweep Personnel and UXO Technicians I and II. In addition, the ability to perform the following functions is a requirement for the UXO Technician III: Supervising and performing on-site disposal of OE; preparing explosives storage plans in accordance with all applicable guidance; preparing required OE administrative reports; preparing SOPs for on-site OE operations; performing risk hazard analyses; conducting daily site safety briefings; and supervising the conduct of all on-site tasks directly related to OE operations.

4.3 **UXO Technician II.** This individual shall be a graduate of a school listed in paragraph 2.1. Graduates of schools listed in paragraph 2.1.a or 2.1.b may assume the position based on graduation of the school. Graduates of a school listed in 2.1.c must complete 5 years experience after graduation prior to assuming this position. This individual must be able to fully perform all functions enumerated for UXO Sweep Personnel and UXO Technician I. In addition, the ability to perform the following functions is a requirement of the UXO Technician II: Properly storing OE material in accordance with applicable guidance; identifying fuzes and determining fuze condition; determining a magnetic azimuth using current navigational/locating equipment; performing field expedient identification procedures to identify explosives contaminated soil; preparing an on-site holding area for OE material; and operating modes of transportation for transporting OE material, when appropriate.

4.4 **UXO Technician I.** This individual shall be a graduate of a course listed in paragraph 2.1.c. This individual assists fully qualified personnel (UXO Technician II and above) in the following functions: Conducting reconnaissance and classification of OE and other OE materials; identifying all munitions including bombs and bomb fuzes, guided missiles, projectiles and projectiles fuzes, rockets and rocket fuzes, land mines and associated components, pyrotechnics items, military explosives and demolition materials, grenades and grenade fuzes, and submunitions; locating subsurface OE using military and civilian magnetometers and related equipment; performing excavation procedures on subsurface OE; locating surface OE by visual means; transporting OE and demolition materials; preparing firing systems, both electric and non-electric, for destruction operations; operating Personnel Decontamination Stations (PDS); inspecting salvaged OE-related material and erection of OE-related protective works; and donning and doffing personnel protective equipment. The UXO Technician I shall not determine if OE items are moveable.

5. **Other Labor Categories.** The following labor categories may typically be required to perform each work effort:

5.1 **Biologist.** This individual shall be able to apply a knowledge of principles and theories of biology and related sciences in the collection, measurement, analysis, evaluation, and interpretation of biological information concerning the structure, composition, and history of plants and animals. This includes the performance of basic research to establish fundamental principles to identify and protect special-status species and habitats.

5.2 **Certified Industrial Hygienist (CIH).** This individual shall meet the Office of Personnel Management Standards for the Industrial Hygiene Series GS-690 and is certified by the American Board of Industrial Hygiene with at least 3 years hazardous waste site operations experience. Board certification or eligibility shall be documented by written confirmation by the American Board of Industrial Hygiene (ABIH). Military personnel must be identified as being a qualified Industrial Hygienist by the Surgeon General and be certified by the American Board of Industrial Hygiene.

5.3 **Certified Safety Professional (CSP).** This individual shall meet the Office of Personnel Management Standards for the Safety and Occupational Health Specialist/Manager Series GS-018 or Safety Engineer Series GS

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803 and be certified by the Board of Certified Safety Professionals or be a Registered Professional Engineer, with at least 3 years experience in hazardous waste operations. In addition, it is expected that the CSP, by virtue of his/her education, special studies, and training, have acquired competence in the practice of safety and occupational health.

5.4 Certified Health Physicist (CHP). This individual shall meet the Office of Personnel Management Standards for the Health Physicist Series, GS-1306 and be certified by the American Board of Health Physicists with at least 3 years experience in hazardous waste operations. In addition, it is expected that the CHP, by virtue of his/her education, special studies, and training, have acquired competence in the practice of Health Physics.

5.5 Chemist. Performs a full range of experiments and analyses and any of the duties associated with a lab technician while also holding at least a bachelor's degree in chemistry.

5.6 Drafter 1. Performs drafting work using a computer, requiring knowledge and skills in drafting methods, procedures, and techniques. Prepares drawings of structures, facilities, land profiles, water stems, mechanical and electrical equipment, pipelines, duct system, and similar equipment, systems, and assemblies. Drawings are used to communicate engineering ideas, design, and information. Uses recognized systems of symbols, legends, shadings, and lines having specific meanings in drawings.

5.7 Emergency Medical Technician. Provides emergency medical treatment to sick or injured persons at site of emergency and while in transit to medical facility, working as a member of an emergency medical team. Determines nature and extent of illness or injury, or magnitude of catastrophe, and establishes procedures to be followed or need for additional assistance, basing decisions on statements of persons involved, examination of victim or victims, and knowledge of emergency medical practice. Administers prescribed medical emergency treatment at site of emergency, or in vehicle en route to medical facility, performing such activities as applying splints, administering oxygen, maintaining an adequate airway, treating minor wounds or abrasions, or performing cardiopulmonary resuscitation. Communicates with professional medical personnel at emergency treatment facility to obtain instructions regarding further treatment and to arrange for reception of victims at treatment facility.

5.8 Environmental Engineer. This individual shall have, as a minimum, a bachelor's degree in chemical engineering, civil engineering, or environmental engineering.

5.9 Field Office (Administrative). This individual shall have the same qualifications as a clerk/typist but must be capable of operating the office in the absence of the SUXOS. This person must be able to understand and answer questions relating to project status as obtained from status reports. This individual must also be capable of keeping track of field office personnel and appropriate time sheets.

5.10 Geologist. This individual shall be able to apply a knowledge of principles and theories of geology and related sciences in the collection, measurement, analysis, evaluation, and interpretation of geologic information concerning the structure, composition, and history of the earth. This includes the performance of basic research to establish fundamental principles and hypotheses and develop a fuller knowledge and understanding of geology and the application of these principles and knowledge to a variety of scientific, engineering, and economic problems.

5.11 Heavy Equipment Operator. Operates heavy equipment such as cranes, clamshells, power shovels, motor graders, heavy loaders, carryalls, bulldozers, rollers, scrapers, and tractors. Equipment is used to excavate, load, or move dirt, gravel, or other materials. Operator may be required to read and interpret grade and slope stakes and simple plans. Operator may be required to grease, adjust, and make emergency repairs to equipment.

5.12 Industrial Hygienist (IH). This individual shall meet the Office of Personnel Management Standard for the Industrial Hygiene Series GS-690, with 3 years experience in HTRW work; personnel certified by the American Board of Industrial Hygiene with one year experience in HTRW work; and military personnel identified as being a qualified IH by the Surgeon General having 3 years experience in HTRW work. In addition, it is expected that the IH, by virtue of his/her education, special studies, and training, have acquired competence in the practice of Industrial Hygiene.

5.13 Lab Technician. Performs laboratory tests according to prescribed standards to determine chemical and physical characteristics or composition of solid, liquid, or gaseous materials and substances. Sets up and adjusts

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laboratory apparatus and operates grinders, agitators, centrifuges, ovens, condensers, and vibrating screens to prepare material for testing according to established laboratory procedures. Tests materials for presence and content of elements or substances, such as HTRW. Examines materials using microscope. Records test results on standard forms, writes test reports describing procedures used, and prepares graphs and charts. Cleans and sterilizes laboratory apparatus. May prepare chemical solutions according to standard formulae.

5.14 Laborer. Performs tasks, which primarily require physical abilities and effort involving little or no specialized skill or prior work experience. The following tasks are typical of this occupation: Loads and unloads trucks and other conveyances; moves supplies and materials to proper location by wheelbarrows or hand trucks; stacks materials for storage or binning; collects refuse and salvageable materials; digs, fills, and tamps earth excavations; levels ground using pick, shovel, tamper, and rake; shovels concrete and snow; cleans culverts and ditches; cuts trees and brush; operates power lawnmowers; moves and arranges heavy pieces of office and household furniture, equipment, and appliances; moves heavy pieces of automotive, medical engineering, and other types of machinery and equipment. Spreads sand and salt on icy roads and walkways; picks up leaves and trash.

5.15 Mechanic. Repairs, rebuilds, or overhauls major assemblies of internal combustion automobiles, buses, trucks, or tractors. Diagnoses the source of trouble and determines the extent of repairs required; replaces worn or broken parts.

5.16 Safety Engineer. This individual shall meet the Office of Personnel Management Standards for a Safety Engineer Series GS-803 with 3 years experience in HTRW work; or be certified by the Board of Certified Safety Professionals with one-year experience in HTRW work. In addition, it is expected that the Safety Engineer, by virtue of his/her education, special studies, and training, have acquired competence in the practice of safety and occupational health.

5.17 Security Guard. Protects property from theft or damage, or persons from hazards or interference. Duties involve serving at a fixed post, making rounds on foot or by motor vehicle, or escorting persons or property. May be deputized to make arrests. May be required to demonstrate (1) proficiency in the use of firearms and other special weapons and (2) continuing physical fitness.

5.18 Surveyor. This individual should have minimum of 5 years experience as a Survey Party Chief, performing the following functions: Leading day-to-day work activities of survey party under the direction of a land surveyor; supervising a crew engaged in gathering data about the earth's surface, using a variety of surveying instruments; clearing land and setting stakes to identify certain points; checking final field notes for clarity and accuracy; and completing transmittal of forms.

5.19 Surveyor Aide. Performs any of following duties to assist in surveying land: Holds level or stadia rod at designated points to assist in determining distances and elevations and laying out stakes for map making, construction, mining, land, and other surveys; calls out reading or writes station number and reading in notebook; marks points of measurement with elevation, station number, or other identifying mark; measures distance between survey points, using steel or cloth tape or surveyor's chain; marks measuring point with keel (marking crayon), paint sticks, scratches, tacks, or stakes; places stakes at designated points and drives them into ground at specified elevation, using hammer or hatchet; cuts and clears brush and trees from line of survey, using brush hook, knife, ax, or other cutting tools.

5.20 Truck Driver. This individual shall have the appropriate Commercial Drivers License (CDL) depending on the vehicle type and transportation requirements. This individual drives a truck to transport materials, merchandise, equipment, or workers between various types of establishments such as manufacturing plants, freight depots, warehouses, wholesale and retail establishments or between retail establishments and customers' houses or places of business. May also load or unload truck with or without helpers, make minor mechanical repairs, and keep truck in good working order.

5.21 UXO Sweep Personnel. UXO Sweep personnel assist UXO Technicians and supervisory personnel in the clearance of OE, operating only under the direct supervision of a qualified UXO Technician III. This position requires site and job specific contractor training (which may include ordnance recognition, safety precautions, donning and doffing personnel protective equipment, etc.) but does not require UXO Technician qualifications.

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UXO Sweep Personnel conduct visual and/or instrumented OE search activities in the field; perform field maintenance on military and civilian magnetometers; operate ordnance detection instruments and other similar equipment to include digital geophysical mapping instruments; and remove OE scrap after such items have been certified/verified safe for handling by a qualified UXO Technician. UXO Sweep Personnel shall not excavate anomalies or handle OE. UXO Sweep Personnel shall not be involved in the execution of explosives operations.

6. **Work Standards:** The following are minimum required work standards for OE response actions. Prior approval of the CO shall be obtained to relax these standards.

6.1 **Work Week:** UXO personnel performing OE procedures shall be limited to a 40 hour week, either four 10 hour days or five 8 hour days. Two consecutive work weeks shall be separated by 48 hours of rest.

6.2 Project Team Composition and Roles.

a. Conventional OE Response Actions.

(1) Each UXO team shall consist of one UXO Technician III and six or less team members. UXO teams shall have a minimum of two UXO qualified personnel, one of which shall be the UXO Technician III.

(a) When OE operations are limited to surface removals using UXO Sweep Personnel identified in paragraph 5.21, team composition will be as follows: A basic team will consist of one (1) UXO Technician III, one (1) UXO Technician II, and up to six (6) UXO Sweep Personnel. If the area to be cleared is large scale, two (2) additional UXO Technician IIs and up to twelve (12) UXO Sweep Personnel may be added to the basic team.

(b) The minimum team separation distance for all teams is the greater of 200 feet or the K50 distance of the most probable munition (MPM) for the OE area.

(2) The UXO Technician III shall supervise all OE tasks and UXO teams. This individual may supervise other than UXO teams such as brush-clearing teams. When non-UXO teams are under the direct supervision of someone other than a UXO Technician III, the teams shall be accompanied by a UXO Technician II who will provide OE avoidance support.

(3) The SUXOS shall supervise no more than ten (10) UXO Technicians III. There shall be no more than one SUXOS on an OE project without prior approval of the CO.

(4) A full time UXOSO shall be on site for each OE project. This position may be dual-hatted with the UXOQCS when there are 15 or less people on site. The UXOSO shall not be involved in any OE removal or investigation tasks. The UXOSO shall be directly hired by and work for the prime contractor and shall report directly to someone in the corporate safety chain not directly involved in site operations.

(5) A UXOQCS may not be required full time on site. However, QC functions shall be performed for all field activities. The UXOQCS shall ensure high quality in the field without compromising safety. The UXOQCS shall not perform any removal or investigation tasks. The UXOQCS shall be directly hired by and work for the prime contractor and must report directly to someone in the corporate quality chain not directly involved in site operations. When this position is dual-hatted as the UXOSO, the individual filling this position shall remain on site during the project.

(6) The UXO Technician I shall be limited to the functions listed in paragraph 4.4.

(7) UXO Sweep Personnel may only perform the functions listed in paragraph 5.21.

b. Recovered Chemical Warfare Materiel (RCWM) Response Actions.

(1) A full time UXOSO shall be present during all field operations on a RCWM project site due to the complex hazards posed by RCWM.

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(2) A full time UXOQCS shall be used for all RCWM field operations. This requirement may be relaxed if a written request, citing actual site conditions, is submitted to and approved by the CO.

7. End of DID OE-025.01.

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Attachment A Sample Resume

WILLIE E. PETE

DATE ATTENDED BASIC EOD SCHOOL: MAR-AUG 1965

OTHER PERTINENT TRAINING: HAZWOPER 40 HOUR, JUL 2001; USACE CONSTRUCTION QA, JUL 2002

MILITARY EOD ASSIGNMENTS:

AUG 65-MAY 66	EOD Specialist, 85th Ord Det (EOD), Fort Sheridan, IL Member of EOD response team.
MAY 66-NOV 68	EOD Supervisor, 75th Ord Det (EOD), Fort Riley, KS EOD response team leader. Planned and supervised range clearance activities.
NOV 68-NOV 70	EOD Supervisor, 73d Ord Det (EOD), Fort Wood, MO EOD response team leader. Planned and supervised range clearance activities.
NOV 70-NOV 71	EOD Supervisor, 59th Ord Det (EOD), RVN EOD response team leader
NOV 71-JUL 79	Senior EOD Supervisor, 2d Ord Det (EOD), FRG Supervised Multi-EOD response teams. Planned, executed and managed range clearance activities.
JUL 70-APR 81	Senior EOD instructor, Phase I, EOD School, Redstone Arsenal, AL
APR 81-AUG 83	EOD Sergeant Major, 543d Ord Det (EODCT), Fort Wood, MO Senior Enlisted for a geographical area with seven subordinate EOD Detachments. RETIRED

CIVILIAN UXO EXPERIENCE:

JAN 90-FEB 90	UXO Supervisor, No-Dud, Inc, UXO Team Leader at the Former Erie Ordnance Depot.
MAY 90-DEC 90	UXO Supervisor, PDQ, Inc., UXO Team Leader at the Former Fort James
JUN 91-DEC 91	Senior UXO Supervisor, No-Det, Inc. Supervised eight project teams at the Former Fort Pete
JAN 96-JAN 98	UXO Safety Officer, PDQ, Inc. Implemented the Site Specific Safety and Health Plan for OE operations at the Former Fort Good Luck
JAN 99-DEC 99	UXO Quality Control Specialist, PDQ, Inc. Implemented the Quality Control Plan for OE operations at the Former Fort Hook.
JAN 00- JUL 02	UXO Technician III, No-Det, Inc. Supervised UXO team performing OE operations at the Former Camp Crowder.